DOCUMENT RESUME

ED 242 067 EA 016 589

AUTHOR Katzman, Martin T.
TITLE Implications of Population Redistribution for Education.
PUB DATE 80
NOTE 35p.; Reprinted from: "Population Redistribution and Public Policy," (Washington, D.C., National Academy of Sciences, 1980; ISBN-0-309-02926-0).
PUB TYPE Information Analyses (070) -- Reports - Evaluative/Feasibility (142)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Black Education; De Facto Segregation; Elementary Secondary Education; Enrollment Projections; Enrollment Trends; Equalization Aid; *Metropolitan Areas; Middle Class Students; Population Distribution; *Racial Composition; Racial Integration; Racially Balanced Schools; *Residential Patterns; *School Demography; *School Desegregation; School Resegregation; Urban Schools; *Urban to Suburban Migration

ABSTRACT

Between 1970 and 1977, the proportion of black children in metropolitan areas increased in all regions except the Northeast, while in all regions but the West the white population declined. Although the thrust toward school desegregation since the landmark "Brown vs. Board of Education" decision of 1954 has tended to exacerbate white and/or middle-class flight from public city schools, the currently increasing number of working couples without children may translate into increasing demand for central-city residences and thus a partial restoration of the central city's tax base. The present trend toward state-aid school finance equalization formulas based on fiscal capacity will favor cities in some cases, the suburbs in others. Proposals to aid desegregation by equalizing racial proportions in all metropolitan schools or by offering parents tuition vouchers good for both public and private schools are not likely to succeed. Recently, middle-class blacks have migrated out of cities faster than middle-class whites; those remaining are likely to turn to private education. Although state funding reforms do not inevitably favor the central city, federal aid could affect interregional and interstate migration. Given current trends, however, federal school equalization aid will probably continue to decrease. (JBM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

Reprinted from:
Population Redistribution and Public Policy
ISBN 0-309-02926-0
National Academy of Sciences
Washington, D.C. 1980

ED242067

IMPLICATIONS OF POPULATION REDISTRIBUTION FOR EDUCATION

Martin T. Katzman

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Martin T. Katzman

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

OVERVIEW

Population redistribution has always been with us. Many of the trends observed today have their roots in the 19th century or earlier. The westward movement and relative decline of the Northeast began before the first Census in 1970 fixed the center of population slightly west of Baltimore. As soon as significant urbanization commenced, suburbs were linked to the downtown by horse-drawn streetcars (Warner 1962). The 1970s, however, have brought two related and unprecedented phenomena: an end to metropolitanization in many parts of the country and a turnabout in the chronic decline of many rural areas. Although many central cities lost population in the 1960s, entire metropolitan areas appeared to lose population in the 1970s. Although most of the metropolitan decline occurred in the largest cities and in the Northeast, a slowdown in metropolitan growth is apparent throughout the nation (Berry and Dahmann in this volume).

It is impossible to understand the implications of population redistribution without taking account of the decline in fertility to replacement levels. Population redistribution during periods of aggregate population growth results in more rapid growth for some areas than for others. In the slow-growing areas, newspaper circulation, bank deposits, and utility consumption may not expand as fast as in the boom areas and land values may not increase as much; nevertheless, all areas share in the expansion that American society associates with progress.

Martin T. Katzman is Professor of Political Economy, School of Social Sciences, University of Texas at Dallas.

EA 016 589

When aggregate population growth approaches a standstill, population redistribution is a zero-sum game; growth in one area is an inevitable concomitant of decline in another.

In general, American society has not yet learned to cope, either psychologically or politically, with decline. While there have been pockets of poverty left by declining sectors, such as textiles and coal mining, decline is largely beyond the American experience.

If decline were symmetric to growth, then public policy makers could simply replace a strategy of more building and more hiring with one of less. Because there are major irreversibilities in the behavior of the public sector, particularly in the disposal of public buildings and in firing personnel, a mere shifting of gears from forward to reverse is insufficient. Decline demands innovation because it is a new phenomenon, whereas the problems of growth have been confronted since the birth of the nation.

EFFECTS OF DEMOGRAPHIC CHANGES ON PUBLIC SERVICES, INSTITUTIONS, AND POLICIES

The demographic changes of the 1970s have aggregate, distributional, and compositional dimensions of relevance to the educational sector. The aggregate dimension reflects the absolute number of children of various ages in primary- and secondary-school systems; the distribution reflects their spatial location; and the composition reflects their racial and class attributes.

The Recent Trends

Aggregate Effects Anticipating the impact of aggregate demographic trends is, in principle, easier for education than for other sectors. The reason is that the number of children entering, for example, kindergarten in 5 years can be ascertained by applying mortality tables to the number of 1-year-old children living today. Surprisingly, recent demographic changes and the problems they entail were not widely anticipated by educators and were experienced for several years before they were generally acknowledged.

Aggregate enrollments in primary and secondary schools had increased continuously until 1970. Since then, elementary enrollments have declined at a rate of more than 0.5 percent per year and will continue to decline into the early 1980s and at an even faster rate. If current patterns

TABLE 1 School-Age Population, 1950-1990

	School-Age Population, Age 5-17 (thousands)		
	Elementary Age 5-13	Secondary Age 14-17	Total
1950	22,423	8,444	30,867
1960	32,985	11,219	44,204
1970	36,836	15,910	52,746
1974	34,002	16,878	50,880
1980	30,246	15,753	45,999
1985	30,380[a]	14,388	44,768
1990	34,643[a]	12,941	47,584

[a]Projected from Series II.

SOURCE: U.S. Bureau of the Census. Series P-25, No. 601, in *Current Population Reports*, Tables E, 6 and 8 [as reported in Davis and Lewis (1976, Table 3)].

of fertility persist, these declines will persist through 1990 or beyond. Because of the inertia of the age profile, secondary-school enrollments will continue to decline at least through the late 1980s regardless of any changes in fertility in the next 10 years (see Table 1).

Distributional Effects Because of population redistribution, some school systems have faced or are likely to face more rapid enrollment declines than others. Between 1970 and 1975, enrollments grew between 5 and 8 percent in Arizona, Florida, Alaska, Nevada, and New Hampshire (a state experiencing exurban growth from Boston). While enrollments grew by less than 5 percent in Colorado, Idaho, Virginia, and the remaining northern New England states, they declined in every other southern and western state (Davis and Lewis 1976; National Association of State Boards of Education 1976, Table 2). In Texas, the decline was 1 percent; in California, it was 5 percent.

Within all states, of course, there are growing and declining school systems. Paralleling the overall patterns of population redistribution, net migration of elementary-school-age children (5-14 years old) tends to flow from the central cities to the suburbs and nonmetropolitan areas (Davis and Lewis 1976, Table 6). In the central cities, net out-migration reinforces the change in the age structure and accelerates decline; however, even in suburban

school systems in the aggregate, net in-migration was insufficient to forestall decline. Enrollments declined in 73 of the largest urban districts in the nation from fall 1971 to fall 1975, a phenomenon that affected such Sun Belt cities as Houston and Dallas (National Association of State Boards of Education 1976, p. 5). Because of the preponderance of individuals of child-bearing age among interregional migrants, schools in metropolitan areas with stable or declining populations are likely to decline in enrollments for some time to come (Morrison 1976).

Compositional Effects Declining fertility alters the age distribution of the population. In 1950, only 18 percent of the population was of school age (5-17 years). This percentage continually increased until 1970, when a peak of 26 percent was reached. This percentage will almost certainly decline to 21 by 1980 and if current patterns of fertility persist, the proportion will fall to the level of the 1950s sometime during the 1980s (see Table 2).

Although the trends in age composition among whites and nonwhites are similar, the percentage of the nonwhite population between 5 and 17 years of age is greater. In

TABLE 2 Age Structure of Population, 1950-1990

	Percent Population, Age 5-17			Percent Nonwhite of Total Population, Age 5-17
	White[b]	Nonwhite[c]	Total	
1950			18	
1960	24	28	24	13
1970	25	31	26	15
1974	23	29	24	16
1977	22	28	23	16
1980	20	26	21	17
1985[a]	18	24	19	18
1990[a]	19	23	19	18

[a]Projected from Series II.
[b]As percent of total white population.
[c]As percent of total nonwhite population.

SOURCES: Davis and Lewis (1976, Tables 3, 5), U.S. Bureau of the Census (1978).

1960, 24 percent of the whites were of school age; 28 percent of the nonwhites were in this age bracket. This suggests that communities with higher proportions of nonwhites are likely to have relatively greater educational burdens due to demographic factors alone. More important, the relative share of the nonwhite school-age population has been increasing since 1960 due to differential rates of fertility decline for whites and nonwhites. In 1960, before significant desegregation occurred in either the North or South, nonwhites comprised only 13 percent of the school-age population. In 1970, when massive desegregation began in the South, blacks comprised 15 percent; in 1974, when major desegregation began in northern big cities, nonwhites comprised 16 percent. This percentage is likely to be 17 in 1980 and 18 by 1990 (Davis and Lewis 1976).

The differential migration trends of blacks and whites indicate that between 1970 and 1977, the proportion of blacks has been increasing in metropolitan areas, while remaining stable in nonmetropolitan areas. Within metropolitan areas, the proportion of blacks rose in the central cities and their suburbs. In all regions except the Northeast, the black population in central cities increased absolutely, while in all regions but the West the white population declined. In all regions, the black population in the suburbs is growing faster than the white population (U.S. Bureau of the Census 1978).

The U.S. Commission on Population Growth and the American Future extrapolated these trends to the year 2000 (Morrison 1976, Table 6). In the cities, the percentage of population under age 15 is expected to drop from 26.4 percent to 23.2 percent in the period 1970-2000, while the percentage of nonwhite children is projected to rise from 29 percent to over 43 percent in the same period. In the suburbs, the percentage of population under age 15 is expected to fall from 29.7 to 22.7. In other words, suburbs are expected to become less child-centered than before and in fact less different from the central cities in this respect. The percentage of suburban children who are nonwhite is expected to rise slightly from about 7 percent to about 9 percent.

The observed trends of the 1970s and their extrapolation to the year 2000 suggest that central-city school systems are likely to become overwhelmingly black. To the extent that suburban school systems remain immune from pressures to integrate and that whites resist sending their children to schools with near black majorities, the likelihood of stable integrated central-city school systems remains dim.

IMPLICATIONS OF DEMOGRAPHIC CHANGE

For the educational sector, the distributional dimension of demographic change--whether one area is growing faster than another--is of less importance than the aggregate and compositional dimensions. The aggregate dimension refers to the relative and absolute decline in the number of school-age children in the population; the compositional dimension refers to the changing location of class, race, income, and subcultural groups.

Changing Age Composition

The changing composition of family types and age-groups in American society may have a great impact, not yet totally discernible, on support for public schooling. The decline in fertility, the protracted period of childlessness among the married, and the general aging of the population affect both the supply and demand for educational funds. In terms of demand, the obvious implication is that the number of children requiring elementary and secondary education is declining as a proportion of the population. In terms of supply, the effects of these trends on electoral support for public education are much more difficult to fathom. Perhaps the recent elimination of the mandatory retirement age and refinancing of the social security system portends greater concern with senior citizens' issues and less concern with youth-oriented issues.

Clearly, families with school-age children derive much greater benefit from well-funded school systems than households without children. Nonetheless, a relative increase in the share of households without children need not necessarily result in a reduction in electoral support for public education on a per-pupil basis, because, as the number of school-age children decreases, the tax rate necessary to raise a given level spending per pupil also falls.

It is useful to distinguish between households whose members have not yet borne children, primarily comprised of young adults that are unmarried or married, and households past the childbearing age. Young, childless households are generally highly mobile both economically and geographically. As a consequence, they tend to rent rather than to own housing and concomitantly tend to have relatively low voting turnout. Older couples, with or without children, have a high propensity for owning their own homes and voting.

Housing tenure has an enormous impact on the support for public expenditures, as indicated by results of referenda and actual community expenditures. Apparently because renters perceive the property tax to be borne largely by the landlord, they are considerably more likely than homeowners to favor local expenditures for education (Bloom 1976, Davis and Haines 1966, Kee 1965, Peterson 1975, Wilson and Banfield 1964). The increasing proportion of younger, childless households, therefore, has offsetting effects on electoral support for public schooling: some households may react with indifference or hostility as a result of receiving no direct benefit, whereas others may demonstrate support as a result of perceiving no direct cost. The increasing proportion of older, childless households, however, would appear to lessen support for public education because among this group are many homeowners who would perceive both the lack of direct benefit and the incidence of the costs.

If all voters in a metropolitan area were collectively to vote on school expenditures, the changing age composition and concomitant tenure composition might or might not result in a decline in support per school child. The nature of school finance and organization in most American metropolitan areas adds a dimension of complexity. The differing interests of each age-group create an incentive for residential segregation. Young households may locate with little attention to public spending; families with children may seek education-oriented suburbs, just as they do today; and older families may seek communities that spend little per pupil but devote taxes to public services of greater interest to their own age cohort.

Support per pupil in the long run does not necessarily diminish, so long as financing is largely local. To the extent that broad-based, statewide taxes are relied upon, the macro-demographic changes may result in reduced support; younger households are probably aware of the impact of school spending on their own sales tax and income tax payments. These results are not inevitable; they can, to some degree, be manipulated by tax policy. For example, property-tax circuit breakers for citizens over 65 may reduce antipathy to educational expenditures.

Surprisingly, there is little definitive evidence that the age composition of a community affects its support for public schooling. Studies on this subject rarely produce significant or easily interpretable results. For example, in a cross-sectional analysis of states, McMahon (1970) finds that for every 1-percent increase in the share of

school-age population, the share of state income spent on schooling, which includes both state and local funds, increases 0.15 percent; time series produce comparable results. In other words, support per pupil appears to fall as the percentages of students in the population rises. One would have expected that opinion in states with a high proportion of families with children would favor greater expenditures per student, but that such preference might be offset by the taxes necessary to support higher costs. In a study of local support for schooling in suburban Boston, Bloom et al. (1975) find that the change in the number of children per household over a 10-year period results in a proportional change in school expenditures per household. This means that school support per child is similar in communities with widely varying shares of school children, when other factors are held constant. Attitudinal surveys by Bloom (1976), however, produce results that contradict the observed patterns; he finds that the elderly, as compared with younger childbearing households, are much less willing to support public-school expenditures.

Needless to say, more research is required into patterns of preference for public expenditures by people at different stages in the life-cycle. It is becoming apparent, for example, that the elderly, despite their greater likelihood of home ownership, support higher local public expenditures than do younger groups; however, they are more interested in police protection and recreation than in education (Bergstrom and Goodman 1973). Nevertheless, voting decisions are not always based on narrow self-interest and preferences are not polarized along the life-cycle. The elderly often provide *some* electoral support for educational expenditures, from which they derive no conceivable direct benefits, whereas all childbearing families are not invariably staunch supporters of high expenditures (Barzel 1973).

Implications of Enrollment Growth and Decline

Because the phenomenon of enrollment decline is new and psychologically unsettling to Americans, dealing with decline demands greater managerial capacity than dealing with growth.

Anticipated Growth When growth in enrollments is anticipated, educators have the opportunity to set aside land for future school construction, or at least to take an

option on such land. Actual construction can be phased with attention to the overall capital budget of the municipality. Not only can recruitment be orderly, but the continual hiring of young teachers (at the low end of the salary scale) ensures that average salaries per teacher remain low. With expansion of the school system, opportunities for upward mobility are high among the teaching staff, and administrative promotions attainable.

Unanticipated Growth When growth has not been fully anticipated, new students begin to crowd the existing classrooms, which may in fact result in decreasing costs per student. The schools facing these growing pains may shift to double sessions until new classroom space can be completed. While school taxes may rise to meet these capital expenditures, the tax base may also rise in proportion, thus maintaining the historical tax rate. The problems of growth are transitional; moreover, educational managers have a whole body of experience to draw upon, as growth has been common to most school systems in the recent past. Planning for growth may ease the transition, but the outcome--more teachers and increased facilities--will be the same regardless of whether planning occurs.

Unanticipated Decline Although a growing school system can expand the teaching staff by hiring, a declining school system cannot so easily contract because of the institution of tenure. Teacher-pupil ratios and hence costs per pupil are likely to rise even though hiring ceases.

In a school system that has ceased hiring, the average age and experience of teachers is likely to rise. On one hand, some evidence suggests that experience can generate substantial pedagogical benefits for students in certain circumstances (Katzman 1971, Murnane 1977). On the other hand, average nominal salaries will rise because teacher salary schedules are stepped. It is not clear on balance whether costs rise faster than benefits.

Confronted with the per-student cost increases created by declining enrollment and an aging faculty of fairly constant size, a school board might foster attrition by freezing the salary schedule. In the face of inflation, a nominally fixed salary schedule suffers a real decline. To the extent that a school board wished to foster attrition among the more experienced teachers, it might freeze salaries at the more senior end of the scale while granting increases to the more junior teachers. What effect such a policy would have on faculty morale is unclear.

Even if teacher attrition keeps pace with the decline in enrollment, there may be pension expenses that cannot be reduced. Because few teacher pension systems have been fully funded, school systems must annually appropriate funds for past teaching service (Tilove 1976). In a growing system, the burden of pensions may not prove excessive, especially because the hiring of new faculty keeps the average teacher age low, but declining systems face a proportionately higher burden of pension payments per active teacher.

In addition to pensions, school plant and equipment are overhead items that are difficult to reduce in the face of enrollment declines. The debt service and maintenance cost of school buildings are more difficult to reduce in the public sector than are similar costs in the private sector. When a national chain wishes to close a branch supermarket, it attempts to find a willing buyer for its building, without regard for the loss or inconvenience to its customers. In contrast, when a school board wishes to close a building, a small group of parents who face severe inconvenience can influence the decision, often outweighing the larger number of parents for whom the benefits are more diffuse.

Anticipated Decline Had school systems correctly anticipated decline, they might have altered their administrative practices by employing more temporary teachers or including severance-pay clauses in contracts, by leasing rather than purchasing school buildings, and by fully funding their pension plans. Because they failed to alter their practices, school systems face higher per-pupil costs, which require higher taxes and in turn dissuade parents from moving into the school district.

It is difficult to assess the relevance of the above theoretical arguments. Several studies attempt to relate costs per pupil to levels or rates of growth in school enrollment or population. These studies are somewhat difficult to interpret because the quality of service is rarely held constant. For example, a large number of studies purporting to test for economies of scale relate costs to community characteristics, but rarely to the quality of education (Katzman 1971, Ch. 4). These limitations aside, none of these studies identify major economies or diseconomies of school systems.

Sternlieb (1974) reviews several studies of small towns that relate costs to rates of growth of enrollment. These studies as well as his own analysis of New Jersey communities

identify no consistent effect of growth or decline on costs of schooling per capita. Using a somewhat different approach, Muller (1975) examines the costs of providing public services in growing and declining large cities. Growing cities tended to have lower costs per capita than declining cities. There is some difficulty, however, in interpreting these results: Does population decline cause high service costs, or do high service costs result in decline?

A study of migration among 75 standard metropolitan statistical areas (SMSAs) by Liu (1977) indicates that almost no inferences can be drawn from Muller's data. He finds that the rate of state-local taxation in a metropolitan area does not affect net migration, the major contributor to differential growth. Conversely, the rate of net migration has no effect on the level of local taxation.

Because the relative stagnation of productivity in the public sector is projected to continue into the near future, the costs of providing a given level of services in any category will increase. The nature of the educational category will tend to change and become more costly, as busing becomes more widespread, and as more and more "special-needs" groups, ranging from linguistic minorities to the physically handicapped, are identified. To the extent that the federal government assumes many of these costs, the effects may not differ among regions or between cities and suburbs. To the extent that these costs are borne locally, as are special-needs programs in Massachusetts, the programs may hit the central cities hardest. Per-student costs are apparently affected less by growth and decline in enrollments than by these other factors, although the evidence is somewhat tenuous.

Subcultural Conflicts

Prior to the Korean War, when net migration was in a rural-urban and south-nonsouth direction, people moved from areas of low educational standards to areas of higher standards. By most objective measures, such as school enrollments, physical facilities, teacher training and verbal skill, and student reading scores, the Southeast and Southwest have caught up to the rest of the nation (Armor 1972, McKinney and Bourque 1971). Except for the southern regions, indicators show that the quality of metropolitan and nonmetropolitan schools is quite similar. Because of the homogenization of schools, migrating

TABLE 3 Indicators of School Quality, Whites in White Schools, 1965

	School Facilities		Teacher Background		Teacher Verbal Score		6th Grade Verbal		1st Grade Verbal	
	Metro	Non-metro	Metro	Non-metro	Metro	Non-metro	Metro	Non-metro	Metro	Non-metro
Middle Atlantic	15.5	13.2	2.8	2.7	25	25	37	36	19	19
Great Lakes	13.9	10.6	2.8	2.7	25	25	37	36	19	20
South	11.2	9.8	2.7	2.7	24	23	36	33	19	18
Southwest	11.3	10.6	2.8	2.8	25	24	35	36	19	19
Pacific	15.7	12.7	3.3	2.9	25	25	36	38	19	19

SOURCE: Armor (1972, Ch. 6).

families will not find schools at their destination markedly different from schools at their origin, at least with respect to school facilities and student basic skills (Table 3).

However, population redistribution is likely to bring into contact families with radically different perceptions and expectations concerning the role of education. In one of the few studies that documents conflict over "cultural" or "social" issues, Gans (1967) vividly describes culture conflict emerging as upper-middle-class urbanites, with an "expansive" or tolerant subculture, moved into tract homes in a formerly rural county dominated by families of strikingly different values. This upper-middle-class group was succeeded by an "invasion" of lower-middle-class urbanites of a different ethnic composition, with a "restrictive" subculture. The conflicts centered not only on fiscal issues--how high should school taxes be?--but also on social issues of discipline versus permissiveness, lockstep versus individualized instruction, emphasis on basics versus frills, etc. Countless such conflicts have occurred and will continue to occur as the rural fringe becomes urbanized and as subcultural groups succeed each other in metropolitan neighborhoods. As northeastern, urban, upper-middle-class households move into small towns of the South, one can expect continual conflict over such social issues as discipline, sex education, and the covert practice of religion in the schools.

Because school districts in the growing areas of the Southeast and Southwest are so large, cultural dissidents are less able to form educational enclaves by moving to the suburbs. Instead, they might be expected to sustain private schools that have become a permanent fixture in the region.

Selectivity of Metropolitan Movers

The relative and absolute decrease of the white and middle-class population in the central city results in several changes that affect the remaining population. The tax base, the mix of potential peers in the classroom, the political ethos of the city, the willingness to tax, and the effective school resources per child can all be expected to change as a result of out-migration.

Changes in the Tax Base per Student The value of real property per student in central cities may be greater or

less than in their corresponding suburbs. In metropolitan areas like Boston, Cleveland, Baltimore, and Milwaukee, real property wealth per pupil was higher in the suburbs in 1969-1970. In others, like New York, Minneapolis, San Francisco, and Denver, real property wealth per pupil was higher in the central city. In still others, like Philadelphia, Detroit, Chicago, and St. Louis, there was little difference between the cities and the suburbs (Reischauer and Hartman 1973).

Although there have been few longitudinal studies of property wealth disparities between city and suburb, there are theoretical reasons to expect continuing disparities that favor the suburbs. First, the process of suburbanization has been associated with a flattening of the gradient of land values emanating from the central business district. In other words, land values have grown faster in sites farther from the central city (Edel and Sclar 1975, Mills 1969, Yeates 1965). While in some cities, like Boston, downtown land values have continued to rise absolutely, in others, like Chicago, land values peaked in the first half of this century. While land represents only about one-fourth of real property values, its variation over space approximates that of the whole. In the 1960s, median housing in the major cities of all regions increased only two-thirds as fast as in their suburbs (Advisory Commission on Intergovernmental Relations 1973, Table B-11).

In the past the migratory patterns of families at different stages in the life-cycle resulted in the suburbs being heavily endowed with school-age children, as compared with the cities. However, the size of the school-age population and property values tended to vary proportionately, thus accounting for the similarity of property wealth per pupil between many cities and their suburbs. The expected change in the age composition of the suburbs, alluded to earlier, provides the second reason that population changes are likely to raise the relative suburban wealth per pupil. The number of school-age children may begin to fall faster in the suburbs than in the cities, while property values may rise faster in the suburbs than in the cities.

These expected adverse consequences of population redistribution on the relative tax base of central-city school systems will be somewhat assuaged by trends in school finance reform, which is discussed below.

Change in Peer Mix To the extent that whites view black schools as inferior--regardless of whether a particular

case warrants such a view--increasing the percentage of blacks in central-city school systems has complex, and largely deleterious, effects on the quality of the peer environment. Where the social class and ethnic composition of a school is largely determined by that of the surrounding neighborhood, schools are likely to vary significantly in the mix of students (Duncan and Duncan 1955, Farley and Taeuber 1973, Kantrowitz 1973, Rhodes et al. 1965). As suggested by a wealth of educational research largely initiated by the *Equality of Educational Opportunity Survey* (Coleman et al. 1966, Mosteller and Moynihan 1972) lower-class students are likely to benefit educationally from attending largely middle-class schools, regardless of race. While middle-class peers were not widely available to lower-class students because of housing segregation, some lower-class students have had these advantages. Moreover, some middle-class blacks have been able to move into white middle-class school attendance zones.

The differential mobility of the white middle class out of the central-city school system reduces the potential of providing a rich peer environment for some lower-class students, reduces the chances of black middle-class children having white middle-class peers, and tends to "tip" the expectations of educators away from goals of achievement toward tasks of order maintenance.

The process of white flight from the central-city schools reflects a divergence between individual values and aggregate behavior. In an ingenious analysis of segregation, Schelling (1971, 1972) noted that the stability of integration depended upon the relative size of the black and white groups and the distribution of preference for contact with members of the other group. Ranking whites from most to least prejudiced, one can draw a cumulative curve of the percentage of whites willing to remain in a school or neighborhood with a given percentage of blacks. If one assumes that blacks move into a school district only by replacing whites, and that in a particular case 20 black families move into a neighborhood of 100 houses, then stability would be achieved if at least 80 percent of the white population would remain in an environment that is 20 percent black. If one assumes that normal turnover would result in an additional 20 percent of the houses being vacated by whites and occupied by blacks, then stability would be achieved if at least 60 percent of the original white families would remain in an environment that is 40 percent black. However, the 60 to 40 ratio rarely results in stability. Whites begin to move out in

response to the black presence, thereby increasing the percentage of blacks, which encourages additional whites to leave the school. The system tips in a cumulative and circular manner until it is almost entirely black.

In terms of integration, the remaining whites and blacks would have been better off if they could have induced the second 20 percent to stay or could have sought other white occupants and established a benign quota. However, resegregation can occur by such a process even when blacks constitute a small percentage of the total school population if the blacks are concentrated in a few white schools. Were the movement of blacks dispersed into all of the white schools, thereby reflecting the proportion of blacks in the metropolitan area, the situation would be stable.

Political Ethos Some scholars attribute to the middle class an abiding concern with efficiency, impartiality, and "public-regardingness" in municipal government; and to the working class, a concern with jobs, favors, protection, and class or ethnic recognition (Katzman 1971, Ch. 4; Wilson and Banfield 1964). Although other scholars have challenged the linkage between ethnicity and "public regardingness" (Wolfinger and Field 1966), the link between class and reform is widely recognized. Therefore, in areas where the proportion of middle-class families is declining, the share of the electorate concerned with maximizing educational outputs is probably also declining. However, if cities, in the future, attract sufficient numbers of middle-class young singles and "empty nesters" to replace the middle-class families with children who are departing, these new middle-class populations may be more concerned with cost cutting than with maximizing educational output.

Willingness to Tax The benefits that a household receives from a big city school system are distributed roughly in proportion to the number of its children, while the costs are paid roughly in proportion to income and wealth. Consequently, big city school systems tend to redistribute income from childless families, usually of higher-than-average income, to families with many children, usually of lower-than-average income (Grubb 1971). The polarization of the big city population between relatively affluent households (both young and elderly) without children and relatively poor households with many children suggests that the asymmetry between benefits and costs will increase.

Under these circumstances, the willingness of the electorate to tax itself is likely to decrease. In South Carolina, there was little relationship between county expenditures per student and the racial composition of the schools in the late 1960s. After desegregation in the 1970-1971 school year, white private-school enrollments increased in proportion to the percentage of blacks in the school-age population. The process of flight left some districts overwhelmingly black, others with a large majority of blacks, and still others, in which blacks were a small proportion of the population, overwhelmingly white. In the 1970s, growth in tax rates and expenditures per pupil was slowest in districts with the highest percentages of blacks, even when such districts ranked relatively high in wealth per student. In other words, districts in which whites had little interest gained relatively little in financial support (Sherman 1977).

Effective School Resources White flight and enrollment decline may not have totally pernicious consequences for poor and minority students. Murnane (1977) has found that in one large northeastern city, the average experience of teachers in minority schools is increasing. The explanation is that freedom of choice in teaching assignments is a privilege associated with seniority in most school systems. In growing or stable systems, lower-class and minority children are usually taught by inexperienced teachers with little choice (Katzman 1971, Ch. 5). As enrollment declines and the teaching force ages, there are fewer escape valves for the more experienced teachers within the school system. To the extent that teaching quality improves with experience (Katzman 1971, Ch. 2), the quality of teaching may improve for the remaining youngsters.

Summary The set of consequences outlined here is most likely to occur in metropolitan areas with relatively small central cities, surrounded by numerous independent suburbs. While the declining metropolitan areas of the Northeast and Midwest have these characteristics, most of the growing metropolitan areas contain relatively larger central cities, with greater powers of annexation (Norton 1977). Suburbanization or a flattening population density gradient in the growing regions of the nation is less likely to be associated with a weakened fiscal base or with middle-class out-migration.

Intermetropolitan/Interregional Migration

Migration is a mechanism of transferring human capital from one location to another. Because of current institutions for financing education in the United States, individual migrants are financed at the expense of taxpayers in one location but enjoy the fruits of their education in another. The shibboleth "brain drain" suggests that there is something inequitable about such a situation (Greenwood 1975, Grubel and Scott 1966).

The normative implications of the migration of skilled and educated workers depend upon whether the family or the individual is considered obligated to pay the costs of education. If the family is taken as the responsible unit, the process of schooling involves an intergenerational transfer of resources, generally unrequited, and the families through taxes pay the costs of schooling. All families in a declining area might educate their children to obtain better opportunities in a growing area, and no inequity would necessarily result from the migration process. If the individual is considered as the responsible party, then the area that financed the education would not receive future tax benefits in return. It should be noted that if the potential migrant remained in the region, the taxes he would pay should be diminished by the public services he would consume in order to derive the net fiscal benefit to the rest of the community. While state and local governments do tend to extract more in taxes than they deliver in benefits to high-income people, the magnitude of income redistribution is minimal (Pechman and Okner 1974).

There is some evidence that the electorate tends to view emigrants as losses to the community, for in areas of high out-migration, the level of support for public schooling tends to be lower even when there is no weakening of the tax base (Weisbrod 1964). High rates of area emigration, then, can result in an inefficiently low level of schooling from the national point of view. With the increasing role of states in the financing of schooling, and the convergence in school quality among regions, the quantitative importance of these inefficiencies is likely to diminish.

THE IMPACT OF PUBLIC POLICY ON POPULATION REDISTRIBUTION

The concept of public policy in the field of education is at best an abstraction. The educational system in the

United States has evolved as a cumulation of decisions made by all branches of government at all levels of the federal system, by religious organizations, and by parents who express their choices among the public and private schools available to them. Several dramatic judicial decisions in the 1960s made the evolution of educational policy prior to that time appear almost glacial. These actions reflect concerns with increasing equality between black and white and between rich and poor.

The Thrust Toward Desegregation

The most viable change in educational policy has been the wholesale attack on de jure segregation and a somewhat more halting attack on de facto segregation in the public schools. The landmark *Brown* v. *Board of Education* decision of 1954, which declared de jure segregation unconstitutional, was followed by a decade of pitched battles over token desegregation and considerable confusion on the parts of lower courts over standards and methods of implementation (Read 1975). The inaction and even obstructionism of Congress were swept aside by the moving events of a march on Washington and the murder of a president committed to civil rights. These events culminated in the passage of the Civil Rights Act of 1964, which empowered the Department of Health, Education, and Welfare (HEW) to provide technical assistance to communities planning desegregation, to set guidelines for integration, and to withhold federal funds from districts practicing racial discrimination. This latter authorization translated into considerable leverage for HEW after the passage of the Elementary and Secondary Education Act of 1965, which provided the first major injection of federal funds into local school systems. In the period 1968-1972, the courts and HEW effectively eliminated dual school systems in the South. In the early 1970s attention was shifted to the North and West, where de facto segregation occurred as a result of residential patterns and intentional gerrymandering of school districts.

Interestingly, the burdens for remedying school desegregation rest upon the school district rather than on any larger sociopolitical unit of which the school district is a part. Suburban districts with few blacks have been almost uniformly excused from sharing this burden. In the few cases in which the courts have imposed metropolitan solutions, such as Charlotte, North Carolina, Louisville, Kentucky, Wilmington, Delaware, and Indianapolis, Indiana,

the suburban areas had been historically joined to county-wide school districts or prevented from doing so with segregative intent (*Swann* v. *Charlotte-Mecklenburg; Newburg* v. *Board of Education; Evans* v. *Buchanan; U.S.* v. *Board;* compare *Bradley* v. *School Board of Richmond*). In most metropolitan areas, especially in the North and West, where housing discrimination as well as market forces have excluded blacks from the suburbs, suburban districts have not been held responsible for de facto segregation. In the landmark Detroit decision, *Milliken* v. *Bradley*, the Supreme Court overturned a city-suburban school consolidation ruling of the district court, but raised the possibility of considering arguments based upon housing discrimination.

Although a case could be made that government-supported housing discrimination in the suburbs has been historically responsible for the heavy concentration of blacks in the central city (Orfield 1975), it is likely that *Milliken* v. *Bradley* will prove a watershed. Through the *Keyes v. School Board No. 1, Denver* decision of 1975, the court ruled that discriminatory action in any part of the school system was presumptive of discrimination everywhere. The Supreme Court's *Dayton* v. *Brinkman* decision in essence reverses the recent precedents by ruling that the remedy is to be proportionate to the wrong. In other words, excluded from the remedy are not only ostensibly innocent suburbs but also those parts of central-city school districts in which no overt segregative acts were perpetrated.

The *Milliken* and *Dayton* decisions, if indicative of future policy, are likely to have a profound effect on the spatial structure of metropolitan areas. In terms of distorting the housing choices of blacks and whites, the situation after *Milliken* but before *Dayton* could be viewed as reflecting the worst of all possible worlds. The racial composition of big city schools would have been determined by city-wide racial proportions. In cities with a high proportion of school-age blacks, the propensity of whites to suburbanize would have been reinforced. As blacks entered inner suburbs in increasing numbers, de facto segregation there would have required cross-busing, encouraging entire suburbs to tip from white to black.[1]

After *Dayton*, the courts are likely to be more tolerant of de facto school segregation created by residential

[1]The most perceptive analysis of the residential choice of whites with and without children is Clotfelter (1974, Ch. 4).

patterns. This might stabilize white enclaves in predominantly black cities. To the extent that suburbs or central cities tip to overwhelmingly black, the courts may follow the precedent of the recent Inglewood case (*New York Times*, May 11, 1975, p. 26, col. 1). This Los Angeles suburb was originally ordered to integrate its schools at a time when the majority of students were white; subsequently, however, the school system underwent a major transition and became predominantly black. The State Superior Court's lifting of the integration order means that the remaining whites may be able to attend public schools in which they are not a decided minority. The following of such a precedent may help stabilize affluent enclaves in cities with black majorities.

If current policy is maintained, the effects of school integration will have worked themselves out by the end of the decade. In cities such as Washington, D.C., and Atlanta, the working out of school integration policy has been associated with a nearly complete abandonment of the central-city public school system by white students, with the exception of a few enclaves. Depending upon the racial proportions of the school-age population, similar results may follow in other big cities with predominantly black enrollment, such as Chicago, Philadelphia, and Baltimore (Farley 1975).

Impacts of Desegregation on Population Redistribution

Thus far, results of current desegregation pressures appear dramatic. In the mid-1960s, indexes of segregation in the public schools were high, on the order of 80.[2] Across cities, these indexes were highly correlated with residential segregation. By the early 1970s, school segregation decreased in big city systems in all regions of the nation, and especially in the South. The desegregation of big city systems is only part of the picture. With the

[2]An index of segregation or dissimilarity can vary theoretically from 0 to 1. Intuitively, the value of the index represents the share of one group that would have to be redistributed in order to conform to the spatial distribution of another group. A value of 80 means that 80 percent of the blacks (or whites) would have to be redistributed geographically to conform to the spatial distribution of whites (or blacks).

disproportional suburbanization of white youngsters, interdistrict segregation increased. In most of the large city school systems, whites have become relatively dispersed among blacks, but the number of whites per black pupil has decreased concomitantly (Coleman et al. 1975, Farley and Taeuber 1973).

Whether desegregation has precipitated white flight or middle-class flight from the public school has stimulated considerable research in various social science disciplines (Katzman 1978). Without question, factors like population growth, income gains, and job redistribution have encouraged suburbanization long before courts moved into the arena. The existing literature indicates that almost all central cities, with the exception of a few booming cities of the Southeast and Southwest, have been experiencing enrollment decline since the late 1960s because of declining birthrates and continued suburbanization. The rate of white enrollment decline is greater in cities with (1) higher proportions of blacks in the public schools, (2) greater total enrollment, and (3) numerous suburbs that serve as escape valves. As indicated by cross-sectional and time-series comparisons of enrollment changes, housing prices, and mover behavior, there is indeed evidence that the integration of blacks into exclusively white schools stimulates white flight. Desegregation tends to increase the rate of white enrollment decline in proportion to (1) the percentage of blacks in the public schools, (2) the total enrollment, and (3) the urban-suburban differentials in racial proportions. The evidence for "threshold" or "tipping" effects is mixed: the fragmentary evidence suggests that when blacks comprise less than 25 percent of district enrollment, whites are insensitive to small changes in black enrollment, but when blacks comprise more than 50 percent, white enrollment decline is precipitous. When these characteristics are taken into account, federal actions--in either the executive or judicial branch--have had similar affects on integration in the North and South. Furthermore, the instruments of integration--redistricting or busing--make little difference in the outcome.

Migration to the suburbs has quantitatively contributed much more to white enrollment declines than has private education. Where school systems are county-wide and suburbs do not offer an escape, approximately 5-10 percent of the white school-age population uses private schools, even when the black proportion is below the 25-percent threshold. As the black proportion rises, the likelihood

of white students shifting to private education is proportional to family income. Consequently white enrollment decline in response to integration results in a downgrading of the social-class composition of the remaining white school population (Clotfelter 1975, Giles et al. 1976, Katzman 1978, Ch. 3).

Changes in the composition of the white population, however, may create pressures countering white flight. The increasing number of families without children, particularly with two wage earners, may translate into increasing demand for central-city residences. These families, caring little about the quality of public schools, may be attracted to locations more accessible to jobs and big-city amenities, and particularly to neighborhoods of historic value. The big city of the future might be comprised of young and affluent whites without children, working-class blacks, and destitute lower-class individuals of all ethnic groups.

Equalizing School Finance

A second set of equality issues focuses upon school finance. Here the initiative for new policies has been largely at the state level, the Supreme Court having indicated no federal interest in *San Antonio* v. *Rodriguez*. In the late 1960s and early 1970s, there was a flurry of academic proposals to reform educational finance and increase school expenditures in poor districts (Coons et al. 1970, Reischauer and Hartman 1973, Wise 1968). Paradoxically, at the same time a series of major studies came to the disheartening conclusion that additional expenditures yielded little benefit as measured by cognitive scores (Coleman et al. 1966, Katzman 1971, Jencks et al. 1972, Mosteller and Moynihan 1972). Thus, the intellectual underpinning of an argument linking school-expenditure equalization to equality of opportunity and hence equality of results was challenged at the very time courts appeared most interested in school finance reform.

In the early 1970s, academic arguments notwithstanding, landmark decisions in California (*Serrano* v. *Priest*) and New Jersey (*Robinson* v. *Cahill*) found that disparities in real property values per pupil resulted in unconstitutional inequalities in school spending and that new systems of financing were required. State legislatures have been slow to implement court orders: in the early 1970s there were only weak trends toward increasing state support for elementary and secondary education, and there was little

evidence that interdistrict inequality was decreasing. While the level of state support climbed from about 20 percent to 40 percent from 1920 to 1950, it remained almost invariant until 1975. The Elementary and Secondary Education Act of 1965 (ESEA) raised the federal share of school financing from 3 percent of the total to 8 percent in 1968; the 1972 federal share was only 7 percent (Reischauer and Hartman 1973).

Judicial initiatives in school finance reform came to fruition in 1975 when the New Jersey Supreme Court threatened to close schools unless the legislature implemented a satisfactory financing plan. Courts in California and nearly 2 dozen other states followed (Lawyers' Committee for Civil Rights Under Law 1978). Among these states that underwent school finance reform, the state share of funding rose from 39 percent to 52 percent (Odden et al. 1976). Whether intrastate inequalities in expenditures have correspondingly decreased in school-reform states has not been well researched, although cross-sectional analysis indicates that equality among districts varies directly with the share of state support (Katzman 1971, Ch. 4).

It is conceivable that in the next decade, all states will increase levels of support, thereby encouraging intrastate equalization. Central cities may be increasingly successful in tapping state coffers to serve an expanding circle of "special need" students. While these policies may raise expenditures and lower taxes in the cities relative to the suburbs, they are unlikely to make the central city significantly more attractive to families with children. Parents are more sensitive to peer achievement than to school expenditures as an indicator of school quality. Because peer achievement is so highly related to social class, which is highly related to race (Mosteller and Moynihan 1972), an improved fiscal picture for the central city is unlikely to offset a deteriorating social-class composition in attracting white families with school-age children.

Ironically, school finance reform may have a greater effect on the mobility of whites without children than on those with children. An influx of state aid based upon fiscal capacity per pupil will permit a greater reduction (or slower increase) in property taxes in school districts with relatively low real property wealth per student. As noted above, some cities are relatively wealthier than their suburbs; others are less wealthy. The general conclusions that can be drawn are that the implementation of

state-aid formulas based upon fiscal capacity will lower the tax price of dwellings in some jurisdictions in a metropolitan area more than others, and that housing demand will increase disproportionately in such jurisdictions. In some cases, this will favor the cities; in others, the suburbs.

MAJOR POLICY ALTERNATIVES

Desegregation Policy

The Options With regard to racial integration policy, there would seem to be little that any level of government could undertake to alter interregional flows. On the intrametropolitan level there are two very different policies of dubious feasibility that could substantially reduce the flight of white, middle-class families with children.

Metropolitan integration plans that would equalize racial proportions in all schools would lessen the attractiveness of suburbanization as a mode of escaping integration. Evidence from metropolitan school systems in the South suggests that private schools are also used as a means of escaping integration by some white families, particularly the affluent. Although metropolitan integration might encourage some suburban whites to choose this option, it would offer central-city families whose schools were about to tip more acceptable racial proportions. For example, in a metropolitan area where half the whites and all the blacks lived in the central city and the blacks comprised half the central-city population, central-city schools would be 50 percent black. Experience suggests that tipping is likely to occur at these proportions; however, under metropolitan integration, central-city schools would be only 33 percent black. Because suburban schools would also be 33 percent black under a metropolitan plan, central-city schools would be relatively more attractive to the remaining whites.

An alternative solution could be based on tuition vouchers, which parents could spend at any school, public or private. To prevent the establishment of "segregation academies," admissions would have to be color-blind; however, a wide number of schools catering to parents with different lifestyles and subcultural values would emerge, thus encouraging self-segregation. On the assumption that much of racial prejudice is class prejudice, the establishment of schools

of homogeneous social class might make central-city schooling more appealing to the white middle class.

The Squeeze on Middle-Class Blacks An emerging phenomenon that appears ripe for study is the reaction of blacks to white flight (Katzman 1979). Rather than treating blacks as a monolithic community, researchers should distinguish between those who have largely middle-class orientations and the remainder of the population. The aspirations and perceptions of middle-class blacks concerning school quality are similar to those of whites, although blacks are perhaps more perceptive of class and subcultural differences within the black population and hence are less likely to engage in "statistical discrimination"--that is, assume that a school is lower class simply because it is overwhelmingly black. Nevertheless, the reduction in the number of middle-class whites in a big-city school system is likely to have two deleterious effects on black middle-class children: (a) the tone of the school system may shift from an emphasis on achievement and mobility to an emphasis on maintaining order and discipline; and (b) middle-class students, who are a minority among blacks in most big city schools, may be victimized by their lower-class peers, who are hostile to middle-class behavior. [This latter effect may be a reason why some middle-class blacks have difficulty in transmitting their status to their own children (Duncan 1967)]. Middle-class blacks thus may feel increased pressures to extract their children from lower class public school environments.

Three options for middle-class black parents are self-segregation within big-city school districts, movement to inner suburbs, and use of private education. In attempting to segregate themselves from working-class and lower-class households, middle-class blacks may find themselves in increasing competition for well-situated and bascially sound housing in neighborhoods being rehabilitated by affluent white families without children. Although discrimination has hindered black migration to the suburbs in the past, decline of the white population in the aging inner suburbs, combined with the intense demand for housing on the part of blacks, is likely to result in a major influx of blacks to suburban areas in the next decade. In metropolitan areas where the possibilities for self-segregation and suburbanization are inadequate, middle-class black parents will probably turn to private education.

School Finance

Reforms in school finance undertaken at the state level are unlikely to have any interregional consequences. The effects on intrastate and particularly urban-suburban population distributions depend upon the type of formula enacted by a state. Most of the proposed aid formulas include "power equalizing" provisions, which permit localities, regardless of their own tax bases, to use a given tax rate to raise similar amounts of revenue per pupil at similar tax rates. Formulas that link "fiscal capacity" to property tax base per pupil are likely to channel aid into jurisdications with relatively low property tax bases. These jurisdications, however, are no more likely to be high income than low income or urban rather than suburban (Alexander 1975, Callahan et al. 1973). If the definition of fiscal capacity is expanded to include measures of current income, then aid obviously goes disproportionately to poorer districts. These, however, are not invariably more urban.

An alternative formula bases aid upon need, perhaps measured by the percentage of poor in the population, following Title I of the Elementary and Secondary Education Act. Although central-city school districts contain a disproportionate number of poor, differences between cities, suburbs, and rural areas are smaller than one might imagine (Callahan et al. 1973). State-aid formulas based upon need may be more favorable to central cities than those based upon fiscal capacity, but the differences between central cities and rural areas are so small that any differential reductions of urban property taxes are likely to be inconsequential. Although school finance reform may enable particular jurisdictions to reduce significantly their property taxes and hence their housing costs, the central city is not inevitably favored by such reform.

Although interregional migration will not be affected by state funding reforms, it could be significantly affected by large increases in federal funding. Federal aid might be based on three principles: (1) financing for programs that meet special needs, such as bilingual education; (2) compensatory financing for high-cost school systems; and (3) compensatory financing for areas with low fiscal capacity. Federal financing for such special needs as bilingual education would be particularly favorable to states in the Industrial Belt, but would also benefit states on the Pacific Coast and in the Southwest. If special needs were defined broadly--as they probably will be--to include

general categories, such as the handicapped, then it is not clear what interstate biases might result from the distribution of aid. Whether Alabama or New York has more than its share of exceptional children or learning disabilities cannot be ascertained at this time. If federal aid for these categories is forthcoming, the definitions and standards for admission into these categories would probably be shaped by political competition for these funds.

Compensatory aid for high-cost school systems would clearly benefit the Northeastern and Industrial Belt states, particularly their central cities, where nominal salaries are high. Bailing out high-cost systems may reinforce inefficient administration or encourage less stalwart collective-bargaining postures on the part of school systems. The pressures for such a bailout, however, must be recognized.

Compensatory aid for districts with low fiscal capacity are likely to favor the southeastern states and rural areas, where nominal salaries are low. A bias in favor of such areas is inherent in any federal program that distributes aid with reference to nominal income, uncorrected for cost-of-living differentials.

The effects of federal financial aid on interstate migration depend, of course, on the magnitude of this aid. Since the late 1960s, federal aid has been declining and it is unlikely that this trend will be reversed. As was noted previously, the changing age structure of American society is likely to shift political concerns away from children's issues toward issues of the middle-aged and elderly. Although the trends toward equalization of school finance seem firmly established, the level at which expenditures are to be equalized is likely to be lower than in the past.

CONCLUSION

The redistribution of population in the United States from the Northeast to the Southwest, and from the central cities to the suburbs and rural areas, poses important short-term management problems for school systems. The most difficult problems will confront school systems with declining enrollments. These systems will be forced to make unpleasant choices concerning fiscal and employment policies, unless they can diversify their product in the same way that baby-food manufacturers have entered the gerontological market. School systems that shift to the product diversification strategy--utilizing their facilities and personnel

for new functions, such as day care, youth vocational training, mid-career porgrams, and continuing education--will require administrators with entrepreneurial skills. If this shift in orientation cannot be made successfully, declining school systems will confront an era of turmoil in which the interests of taxpayers, children, and teachers will clash. These problems probably will have worked themselves out by the mid-1980s, but the interim will be painful.

The consequences of selective migration to and from the central city will be largely determined by the socioeconomic characteristics of the migrants. To the extent that middle-class parents are highly sensitive to peer environments in schools, the increasing lower-class central-city schools will be less and less attractive. Countervailing forces such as less expensive housing in the city, increasing gasoline prices, and urban cultural amenities may draw childless, white middle-class households, an increasing proportion of the population, back to the central city or slow their exodus. Although the influx or reduced outflow of childless middle-class families will not improve the peer environment for poor and minority school children in the central city, it can improve the tax base of the central city. This improvement can be negated, however, by school finance reform that divorces local school expenditures from local fiscal capacity.

The major change in educational policy in the last 10 years--the thrust toward racial desegregation--was initiated by the federal courts and supported strongly by the Department of Health, Education, and Welfare. Although these policies apparently have had little effect on population redistribution in county-wide school districts in the South, they probably have exacerbated white flight from central cities that have high percentages of blacks and numerous suburbs offering escape from integration. Although the courts currently appear to be retreating from their earlier rulings on integration, many cities with large black populations have already felt their impact. In most of the big cities of the North, Midwest, and West the flight of white students from the public school appears to have an irreversible momentum. Even the rescinding of integration orders in these cities is unlikely to change the trend. By the mid-1980s, the full results of federal policy on school integration will be apparent, and school systems in most big cities will be comprised almost entirely of minorities. For administrators in big cities, the challenge will be making the best of a student population unleavened by the middle class.

Middle-class black families in the central cities, finding themselves surrounded largely by the working class and the lower class, are likely to enter the inner suburbs in great numbers within the next decade. Since black suburbanization in the 1970s is apparently more rapid than white suburbanization, a conference on population redistribution in the 1980s might well focus upon this remarkable and hitherto unnoticed phenomenon.

REFERENCES

Advisory Commission on Intergovernmental Relations (1973) *City Financial Emergencies: The Intergovernmental Dimension.* Commission Report A-42. Washington, D.C.: U.S. Government Printing Office.

Alexander, A. (1975) *Inequality in California School Finance: Dimensions, Sources, Remedies.* RAND R-1440-FF. Santa Monica, Calif.: RAND.

Alonso, W. (1973) Urban zero population growth. *Daedalus* 102(Fall):191-206.

Armor, D. (1972) School and family effects, on black and white achievement: a reexamination of the USOE data. In F. Mosteller and D. Moynihan, eds., *On Equality of Educational Opportunity.* New York: Random House.

Barzel, Y. (1973) Private schools and public school finance. *Journal of Political Economy* 81(January): 174-186.

Bergstrom, T., and Goodman, R. (1973) Private demands for public goods. *American Economic Review* 63 (June):280-296.

Bloom, H. (1976) The Determination and Expression of Demand for Public Services: The Case of Local Public Schools. Unpublished Ph.D. dissertation, Harvard University.

Bloom, H., Brown, H., and Jackson, J. (1975) Residential location and local public schools. Pp. 73-98 in John Jackson, ed., *Public Needs and Private Behavior in Metropolitan Areas.* Cambridge, Mass.: Ballinger.

Callahan, J., Wilken, W., and Sillerman, M. (1973). *Urban Schools and School Finance Reform: Promise and Reality.* Washington, D.C.: National Urban Coalition.

Clotfelter, C. (1974) An Economic Analysis of the Effect of School Desegregation on Residential Location and Private School Enrollment. Unpublished Ph.D. dissertation. Harvard University.

Clotfelter, C. (1975) School desegregation, "tipping," and private school enrollment. *The Journal of Human Resources* XI(December):28-50.

Coleman, J., Campbell, E., Hobson, C., McPartland, J., Mood, A., Weinfeld, F., and York, R. (1966) *Equality of Educational Opportunity* (2 volumes). Washington, D.C.: U.S. Office of Education.

Coleman, J., Kelley, S., and Moore, J. (1975) Trends in School Desegregation, 1968-73. Urban Institute Paper 722-03-01, Washington, D.C.

Coons, J., Clune, W., and Sugarman, S. (1970) *Private Wealth and Public Education*. Cambridge, Mass.: Harvard University Press.

Davis, O., and Haines, G. (1966) A political approach to a theory of public expenditure: the case of municipalities. *National Tax Journal* 19(September):259-275.

Davis, R., and Lewis, G. (1976) The Demographic Background to Changing Enrollments and School Needs. Center for the Study of Public Policy, Cambridge, Mass.

Duncan, O. (1967) Discrimination against Negroes. *Annals of the American Academy of Political and Social Science* 371(May):85-103.

Duncan, O., and Duncan, B. (1955) Residential distribution and occupational stratification. *American Journal of Sociology* 60(March):493-503.

Edel, M., and Sclar, E. (1975) The distribution of real estate value changes: metropolitan Boston, 1870-1970. *Journal of Urban Economics* 2(Fall):366-387.

Farley, R. (1975) Residential segregation and its implication for school integration. *Law and Contemporary Problems* 39(Winter):164-193.

Farley, R., and Taeuber, A. (1973) Racial segregation in the public schools. *American Journal of Sociology* 79 (January):888-905.

Gans, H. (1967) *The Levittowners: Ways of Life and Policies in a New Suburban Community*. New York: Random House.

Giles, M., Gatlin, D., and Cataldo, E. (1976) *Determinants of Resegregation*. Report No. NSF/RA-760179. Washington, D.C.: National Science Foundation.

Greenwood, M. (1975) Research on internal migration in the United States: a survey. *Journal of Economic Literature* 13(June):397-433.

Grubb, M. (1971) The distribution of costs and benefits in an urban public school system. *National Tax Journal* 24(March):1-12.

Grubel, H., and Scott, A. (1966) The international flow of human capital. *American Economic Review* 56(May): 268-274

Jencks, C., Smith, M., Acland, H., Bane, M., Cohen, D., Gintis, H., Heyns, B., and Michelson, S. (1972)

Inequality: A Reassessment of the Effects of Family and Schooling in America. New York: Basic Books.

Kantrowitz, N. (1973) *Ethnic and Racial Segregation in the New York Metropolis*. New York: Praeger.

Katzman, M. (1971) *The Political Economy of Urban Schools*. Cambridge, Mass.: Harvard University Press.

Katzman, M. (1978) The Quality of Municipal Services, Central City Decline, and Middle-Class Flight. Department of City and Regional Planning, Harvard University.

Katzman, M. (1979) Black Flight: The Middle Class Black Reaction to School Integration and Metropolitan Change. Discussion Paper No. 17. Southwest Center for Economic and Community Development, University of Texas at Dallas.

Kee, W. (1965) Central city expenditures and metropolitan areas. *National Tax Journal* 18(December):337-353.

Lawyers' Committee for Civil Rights Under Law (1978) Update on State-Wide School Finance Cases. Washington, D.C.

Leppert, J., and Routh, D. (1976) An Analysis of State School Finance Systems as Related to Declining Enrollments. A report prepared under contract with the National Institute of Education.

Liu, B. (1977) Local government finance and metropolitan employment growth: a simultaneous-equation model. *Southern Economic Journal* 43(January):1379-1385.

McKinney, J., and Bourque, L. (1971) The changing South: national incorporation of a region. *American Sociological Review* 36(June):399-412.

McMahon, W. (1970) An economic analysis of major determinants of expenditures on public education. *Review of Economics and Statistics* 52(August):242-252.

Mills, E. (1969) The value of urban land. Pp. 231-256 in Harvey S. Perloff, ed., *The Quality of the Urban Environment*. Baltimore, Md.: Johns Hopkins.

Morrison, P. (1975) *The Current Demographic Context of National Growth and Development*. RAND Paper Series. Santa Monica, Calif.: RAND.

Morrison, P. (1976) *The Demographic Context of Educational Policymaking*. RAND Corporation Paper P-5592. Santa Monica, Calif.: RAND.

Mosteller, F., and Moynihan, D., eds. (1972) *On Equality of Educational Opportunity*. New York: Random House.

Muller, T. (1975) *Growing and Declining Urban Areas: A Fiscal Comparison*. Working Paper 0001-02. Washington, D.C.: The Urban Institute.

Murnane, R. (1977) The Impact of Changing Student Enrollment Patterns on the Distribution of Teachers in an Urban School District. National Insitute of Education, Finance and Productivity Group, Washington, D.C.

National Association of State Boards of Education (1976) *A Report on Declining Enrollments.* Imperative of Leadership Series, Vol. II, No. 1. Denver, Colo.: NASBE.

Norton, R. (1977) City Life Cycles. Unpublished Ph.D. dissertation, Princeton University.

Odden, A., Augenblick, J., and Vincent, P. (1976) *School Finance Reform in the States, 1976-77.* Denver, Colo.: Education Commission of the States.

Orfield, G. (1975) Federal policy, local power, and metropolitan segregation. *Political Science Quarterly* 89 (Winter):777-802.

Pechman, J., and Okner, B. (1974) *Who Bears the Tax Burden?* Washington, D.C.: Brookings Institution.

Peterson, G. (1975) Voter demand for public school expenditures. Pp. 99-120 in J. Jackson, ed., *Public Needs and Private Behavior in Metropolitan Areas.* Cambridge, Mass.: Ballinger.

Read, F. (1975) Judicial evolution of the law of school integration since *Brown* v. *Board of Education.* *Law and Contemporary Problems* 39(Winter):7-49.

Reischauer, R., and Hartman, R. (1973) *Reforming School Finance.* Washington, D.C.: Brookings Institution.

Rhodes, A., Reiss, A., and Duncan, O. (1965) Occupational segregation in a metropolitan school system. *American Journal of Sociology* 70(May):682-694.

Schelling, T. (1971) Dynamic models of segregation. *Journal of Mathematical Sociology* 1(July):143-186.

Schelling, T. (1972) Neighborhood tipping. Pp. 157-184. in Anthony H. Pascal, ed., *Racial Discrimination in Economic Life.* Lexington, Mass.: Lexington Books.

Sherman, J. (1977) *Underfunding of Majority-Black School Districts in South Carolina.* Washington, D.C.: Lawyers' Committee for Civil Rights Under Law.

Sternlieb, G. (1974) *Housing Development and Municipal Costs.* Chs. 4-6. New Brunswick, N.J.: Rutgers University Press.

Tilove, R. (1976) *Public Employee Pension Funds.* A Twentieth Century Fund Report. New York: Columbia University Press.

U.S. Bureau of the Census (1978) *Social and Economic Characteristics of the Metropolitan and Nonmetropolitan Population: 1977 and 1970.* Series P-23, No. 75 in *Current Population Reports.* Washington, D.C.: U.S. Department of Commerce.

Warner, S. (1962) *Streetcar Suburbs: The Process of Growth in Boston,* 1870-1900. Cambridge, Mass.: Harvard University Press.

Weisbrod, B. (1964) *External Benefits of Public Education.* Princeton, N.J.: Princeton University Press.

Wilson, J., and Banfield, E. (1964) Public-regardingness as a value premise in voting behavior. *American Political Science Review* 58(December):876-887.

Wise, A. (1968) *Rich Schools, Poor Schools.* Chicago: University of Chicago Press.

Wolfinger, R., and Field, J. (1966) Political ethos and the structure of city government. *American Political Science Review* 60(June).

Yeates, M. (1965) Some factors affecting the spatial distribution of Chicago land values, 1910-1960. *Economic Geography* 41:57-70.